Patent claims

1. System for lubricating a closing mechanism (1) on fifth wheels (2) with a closing mechanism (1) arranged on the bottom side of a coupling plate (3), having at least one closing hook (4) and/or closing bar (5) provided with a coating, and a grease reservoir (6), which is connected by a lubricating line (7) to the closing hook (4),
characterized in that

the coating of the closing hook (4) and/or closing bar (5) is configured as a sliding coating (8) and the grease reservoir (6) is a grease cartridge (9), with the grease cartridge (9) arranged on the fifth wheel (2).

2. System per claim 1, characterized in that the grease cartridge (9) is coordinated with the fifth wheel (2).

3. System per claim 1 or 2, characterized in that the grease cartridge (9) is arranged underneath the coupling plate (3).

4. System per one of claims 1 to 3, characterized in that the grease cartridge (9) has a drive unit (10).

5. System per claim 4, characterized in that the drive unit (10) comprises an electromechanical drive.

6. System per claim 4, characterized in that the drive unit (10) comprises a chemical drive.

7. System per one of claims 4 to 6, characterized in that the drive unit (10) is connected to a variable control mechanism (11).

8. System per claim 7, characterized in that the variable control mechanism (11) comprises an engine control mechanism.

9. System per claim 7, characterized in that the variable control mechanism (11) comprises a valve control mechanism.

10. System per claim 9, characterized in that the valve control mechanism (12) comprises a flow restriction valve arranged in the lubricating line.

11. System per one of claims 7 to 10, characterized in that the variable control mechanism (11) communicates with a vehicle control unit.

12. System per one of claims 7 to 10, characterized in that the variable control mechanism (11) communicates with a coupling control unit.

13. System per one of claims 7 to 10, characterized in that the variable control mechanism (11) communicates with a pressure sensor (13) arranged on the coupling plate (3).

14. System per one of claims 1 to 13, with a closing hook (4) for use in a fifth wheel (2), wherein at least one outer surface is provided with a coating, characterized in that the coating is in the form of a sliding coating (8).

15. System per claim 14, characterized in that the sliding coating (8) consists of a multilayer system.

16. System per claim 15, characterized in that the multilayer system is preferably composed of at least a first layer, which comprises an iron alloy with nickel and molybdenum fractions, and a second layer of PTFE, applied to the first layer.

17. System per one of claims 14 to 16, characterized in that the sliding coating (8) has a layer thickness of 50 to 150μm.

18. System per claim 17, characterized in that the sliding coating (8) has a layer thickness of 70 to 130 μm.

19. System per one of claims 1 to 18, with a closing bar (6) for use in a fifth wheel (2), wherein at least one outer surface is provided with a coating, characterized in that the coating is in the form of a sliding coating (8).